Health Care Reform in Romania: Reorganisation of Neonatology Services

Based on a request of the Romanian Government the Swiss Agency for Development and Cooperation (SDC) supports the Romanian Swiss Neonatology Project (RoNeonat) aiming at the reduction of neonatal mortality in Romania.


Romania had a well organized health system based on the Bismarckian sickness fund model during the first half of the 20th century. Due to its limited coverage the system was changed since 1949 to a state run health system with universal coverage resembling the system used in the Soviet Union characterised by government financing, central planning, rigid management and a state monopoly over health services. As the private system was abolished all professionals in the health system had the status of salaried civil servants. The absence of competition or individual initiative lead to a highly regulated, standardized and centralized system operated through the Ministry of Health. The typical problems of such systems, such as the poor quality of first level services, inadequate referral and the overemphasis on hospital-based curative services with lack of good equipment and drugs and centralized and inequitable allocation of resources can be felt up to today.

Since the revolution of 1989, Romania has gone through a period of rapid and major change in every sector. The Romanian political system was changed, moving the country from a soviet style system in the direction of liberal-democracy. Economic reform has been rather gradual and many business have been left under state control. Health care reform started in the early 1990s with major organisational changes taking place since 1995. Social and Health Insurance was re-instated and a restructuring of hospital organisation transferring the state owned, tax based system into a more decentralized and pluralistic social health insurance system, with contractual relationships between health insurance funds as purchasers and health care providers.
The health status of the Romanian population has steadily declined since the 1960s relative to the rest of Western European countries. Life expectancy at birth is five years lower than in Western Europe with a huge variation between Bucharest (1.5 years above national average) and the eastern part of the country (2.5 years below national average). The part of the population living in absolute poverty is among the highest in the European Union. Infant mortality (20.5 per 1000 live births in 1998) is almost three times higher than in Western Europe. Maternal mortality (40.5 per 100,000 live births) is six times the EU average despite a huge decline since 1990. Tuberculosis is on the rise and HIV/AIDS particularly in children is a huge problem. However, the number of new HIV cases has declined in recent years due to the end of a number of unsafe medical practices in children’s foster homes.

Focus on the newborn: The Romanian Swiss Neonatology Project

The health situation of the newborn depends on a variety of factors. These include not only health systems related and clinical issues but also socio-economic, knowledge based and attitudinal factors. Preventive measures including health education for couples and a thorough follow up of pregnant women are insufficient leading to a high percentage of premature births requiring specialised intensive care. Perinatal services in Romania are under particular pressure suffering from a lack of specialised equipment and training at all levels of service delivery, insufficient collaboration between obstetricians and neonatologists, a weak organisational framework in terms of referral systems and a non-existent emergency transport system for neonates in many areas outside of the capital. The quality of neonatal services in Romania varies largely between the three levels of health care delivery: level I as the entry level, level II as the intermediate level and level III as the referral centre of a region. Whereas all levels suffer from a lack of qualified staff and equipment, the situation is much worse at the lowest level of care. Often there is no staff trained in neonatology at all and immediate care for the neonate at risk is provided by obstetricians. Management of at risk pregnancies with a threat for premature delivery is weak so that a referral of mothers with children in utero is often not possible. Transport facilities for neonates under intensive care conditions are hardly available. Where the necessary equipment is available, often needed consumables are in shortage or missing totally. Financial resources provided through national and regional insurance houses are frequently insufficient or released late so that procurement costs cannot be met in time.

The Romanian Swiss Neonatology Project supported by the Swiss Agency for Development and Cooperation (SDC) aims at the reduction of neonatal mortality in Romania. Following a needs assessment and a thorough analysis of Romanian health indicators the modernisation of the Romanian neonatology system was identified as the key objective the project would have to achieve. Two Romanian regions were selected for project implementation: Iasi will host the referral centre for the Moldavia region including the departments of Iasi,
Neamt and Vaslui. The three departments combine a population of 2 Million inhabitants with more than 17,000 neonates in 2001. Tîrgu Mureș will host the referral centre for the Transylvania region including Mureș and Harghita. The two departments have a combined population of 1 Million inhabitants with nearly 10,000 neonates in 2001. The two regions serve as model areas with the option to implement successful strategies in the rest of the country through other independent projects. In every region all levels of neonatology service provision (levels I to III are included in the project) will be addressed. The following elements will lead to a modern system of neonatology curative and preventive care:

Training of neonatology staff will be done in a step down manner beginning with a training of trainers in Swiss university clinics. Physician and nurse teams are trained to share the acquired knowledge in a step down process with their colleagues. Local training will be facilitated through the establishment of regional training centres. Training will improve the neonatology care at all levels. Selected equipment items to complement existing equipment and to operationalise neonatology care centres will be procured together with a basic set of spare parts. The selection of equipment will be done through a participatory process and based on needs assessment, sustainability criteria and adaptedness to the local environment and to match the skills acquired through training. The development and application of clinical guidelines and procedures based on the acquired skills and the procured equipment will complete a comprehensive improvement of quality of care package. The ability to evaluate quality is an essential part of quality assurance. For neonatology services long term effects of neonatal and intensive care are important aspects of quality. The project will implement a long term follow up system to capture not only physical but as well cognitive and psychological development of children who underwent intensive care treatment.

Although in principle the best and safest way of transporting neonates at risk is to transfer them to specialised centers when they are still in their mother’s womb, the organisation of a transport system for neonates remains an important factor in the referral system. A reorganisation of the transport facilities including the procurement of some transport equipment for neonates under intensive care conditions will be undertaken.

Preventive measures and information campaigns will be undertaken to reduce the number of pregnancies at risk including premature birth and to motivate women to participate in prenatal visits. The collaboration between family practitioners, obstetricians and neonatologists will be strengthened to create a continuum of care for mothers and newborns.

Through its first steps the project initialised the regionalisation of neonatology facilities in the implementation area defining clearly the referral structures including the type of services to be delivered at each level and thereby
targeting sparse funds in an effective way. Currently the training of trainers has started in Switzerland to prepare
the necessary subjects for step down training and to develop the necessary curriculum. The rehabilitation of
neonatal facilities involved in the project has started as well.

The RoNeonat project is met with high expectations from the Romanian side as it is highly innovative for the
Romanian context and it re-establishes a focus on decentralised high quality care and a public health focus on
infant morbidity and mortality.

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